

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for improving the output signal accuracy of a transmitter with a forward branch for converting an input signal into a signal for transmission, the forward branch comprising an adaptation unit (103) for applying a predistortion to the input signal and a power amplifier (106), and with a first feedback branch (110), the first feedback branch (110) generating a feedback signal from the signal for transmission, said feedback signal being fed back to the adaptation unit (103), wherein, in said first feedback branch, the frequency of said signal for transmission is down-converted and wherein the down-converted signal is analog-to-digital analogue-to-digital converted, and wherein the predistortion applied to the input signal is determined according to the feedback signal, the method comprising the steps of:

- measuring the output power of said signal for transmission in a second feedback branch (201)
- converting analogue analog output power measurements of the second feedback branch to digital values,
- processing said analog-to digital analogue-to-digital converted signal values of said first feedback branch by an integrating method,
- comparing the processed analog-to digital analogue-to-digital converted signal values of the first feedback branch with the digital values of the measurement,
- deriving a correction factor from said comparison, and
- multiplying said analog-to digital analogue-to-digital converted values of the first feedback branch with said correction factor for adjusting the predistortion according to said measurement of the output power.

2. (Original) The method according to claim 1, wherein the adjusting according to said measurement is performed on the feedback signal.

3. (Currently Amended) The method according to claim 1 ~~or 2~~, wherein said measurement of the output power is performed by an integrating method.

4-6. (Canceled)

7. (Currently Amended) The method according to claim 1 [[6]], wherein the same time constant is used for integrating the output power measurement of the second feedback branch and for integrating said analog-to-digital-converted signal values of the first feedback branch.

8 -9. (Canceled)

10. (Currently Amended) A transmitter with a forward branch for converting an input signal into a signal for transmission, the forward branch comprising an adaptation unit (403) for applying a predistortion to the input signal and a power amplifier (406), and with a first feedback branch (440), the first feedback branch (440) being adapted to generate a feedback signal from the signal for transmission by down-converting the frequency of said signal for transmission and converting the down-converted signal analog-to digital and being connected to the adaptation unit (403), wherein the adaptation unit (403) is adapted to determine said predistortion according to the feedback signal, wherein the transmitter comprises:

a second feedback (204) branch with a measurement unit (202) for the output power of said signal for transmission, said second feedback branch (204) being connected to the adaptation unit (403), ~~and wherein the transmitter comprises~~

- means for converting analog ~~analogue~~ output power measurements of the second feedback branch to digital values,

- means for processing said analog-to digital ~~analogue-to-digital~~ converted signal values of said first feedback branch by an integrating method,

- means for comparing the processed analog-to digital ~~analogue-to-digital~~ converted signal values of the first feedback branch with the digital values of the measurement,
- means for deriving a correction factor from said comparison, and
- means for multiplying said analog-to digital ~~analogue-to-digital~~ converted values of the first feedback branch with said correction factor for adjusting the predistortion according to said measurement of the output power.

11. (Currently Amended) The transmitter according to claim 10, wherein said first feedback branch comprises a frequency converter ~~(108)~~ and an analog-to-digital converter ~~(109)~~.

12. (Currently Amended) The transmitter according to claim 10 ~~or 11~~, wherein said measurement unit ~~(202)~~ is an integrating measurement unit.

13. (Currently Amended) The transmitter according to claim 10 ~~any of the claims 10 to 12~~, wherein said adaptation unit ~~(103)~~ is adapted to adjust the predistortion according to said measurement.

14. (Currently Amended) The transmitter according to claim 10 ~~any of the claims 10 to 13~~, wherein said adaptation unit ~~(103)~~ is a predistortion unit.

15. (New) A computer program product stored on a computer readable recording medium for improving the output signal accuracy of a transmitter with a forward branch for converting an input signal into a signal for transmission, the forward branch comprising an adaptation unit for applying a predistortion to the input signal and a power amplifier, and with a first feedback branch, the first feedback branch generating a feedback signal from the signal for transmission, said feedback signal being fed back to the adaptation unit, wherein, in said first feedback branch, the frequency of said signal for transmission is down-converted and wherein the down-converted signal is analog-to-digital converted, and wherein the predistortion applied to the input signal is

determined according to the feedback signal, the computer program product comprising program code portions for:

measuring the output power of said signal for transmission in a second feedback branch;

converting analog output power measurements of the second feedback branch to digital values;

processing said analog-to digital converted signal values of said first feedback branch by an integrating method;

comparing the processed analog-to digital converted signal values of the first feedback branch with the digital values of the measurement;

deriving a correction factor from said comparison; and

multiplying said analog-to digital converted values of the first feedback branch with said correction factor for adjusting the predistortion according to said measurement of the output power.

16. (New) The computer program product according to claim 15, wherein the adjusting according to said measurement is performed on the feedback signal.

17. (New) The computer program product according to claim 15, wherein the measurement of the output power is performed by an integrating method.